

Education Research Brief

NAPLAN Report Shows Little Progress in Reducing Inequity in Education

Trevor Cobbold

April 2016

SAVE OUR SCHOOLS

<http://www.saveourschools.com.au>

<https://twitter.com/SOSAust>

saveourschools690@gmail.com

Summary

The national report on the NAPLAN results for 2015 published last December shows continuing large inequities in education in Australia. Large proportions of disadvantaged students are not achieving national standards in literacy and numeracy and there are large achievement gaps between disadvantaged and advantaged students, most of which have not changed since 2008 and some have increased.

Large proportions of disadvantaged students are below national standards

- Students from low education families (LES) are nine times more likely than students from high education status families (HES) to not achieve the Year 5 national reading standard and seven times more likely to not achieve the writing and numeracy standards:
 - 18 per cent of Year 5 students from LES families did not achieve the reading standard, 20 per cent did not achieve the writing standard and 14 per cent did not achieve the numeracy standard compared with two to three per cent of students from HES families;
- Students from LES families are nine times more likely than students from HES families to not achieve the Year 9 national reading standard, five times more likely to not achieve the writing standard and 11 times more likely to not achieve the numeracy standard:
 - 18 per cent of Year 9 LES students did not achieve the national reading standard, 39 per cent did not achieve the writing standard and 11 per cent did not achieve the numeracy standard compared to one to two per cent of HES students in reading and numeracy and eight per cent for writing;
- Indigenous Year 5 students are 13 times more likely to not achieve the reading standard, 11 times more likely to not achieve the writing standard and 10 times more likely to not achieve the numeracy standard than students from HES families:
 - 26 per cent of Year 5 Indigenous students did not achieve the reading standard, 32 per cent did not achieve the writing standard and 21 per cent did not achieve the numeracy standard;
- Indigenous Year 9 students are 14 times more likely to not achieve the reading standard, seven times more likely to not achieve the writing standard and 17 times more likely to not achieve the numeracy standard than students from HES families:
 - In Year 9, 28 per cent of Indigenous students did not achieve the reading standard, 54 per cent did not achieve the writing standard and 17 per cent did not achieve the numeracy standard;
- Massive proportions of students from LES families, Indigenous students and remote area students did not achieve the Year 9 writing standard – 39, 54 and 38 per cent respectively.
- There was a small reduction in the proportion of LES students below the Year 5 reading and numeracy standards since 2008, but the proportion below the writing standard increased since 2011. There were significant increases in the proportion below the Year 9 reading and writing standards.
- There was a large increase in the proportion of Indigenous students below the Year 9 writing standard since 2011.

NAPLAN scores for disadvantaged students have mostly not improved

- Average reading, writing and numeracy scores for students from LES families at all Year levels have not improved since 2008 or 2009;
- There were large declines of up to a year or more of learning in writing results for LES, Indigenous and remote area secondary school students since 2011.

Large achievement gaps have mostly not reduced

- Year 5 LES and remote area students are about two years behind HES students in reading, writing and numeracy. By Year 9 LES are 4 years behind in reading, writing and numeracy and remote area students are 3½ times behind.
- Year 5 Indigenous students are about three years behind HES students in reading and nearly three years behind in writing and numeracy. Year 9 Indigenous students are about five years behind in reading and numeracy and six years behind in writing;
- Year 9 LES students are achieving at about the same level as Year 5 HES students in reading and writing and only slightly above in numeracy. Year 9 Indigenous students are achieving below Year 5 HES students in reading and writing and about the same as Year 5 students in numeracy;
- The achievement gap between HES and LES students increased significantly in reading and numeracy in Year 5 and in Year 9 reading since 2008;
- There was little change in the achievement gaps between HES students and Indigenous and remote area students.

Few significant improvements

There were few significant improvements in results. The most notable were:

- The percentage of Indigenous students below the Year 5 reading and numeracy standards fell by ten and nine percentage points respectively between 2008 and 2015 while the percentage below the Year 9 numeracy standard fell by ten points;
- A significant increase in average reading scores for Indigenous primary school students since 2008 and in Year 9 numeracy since 2013;
- A significant increase in the average reading score for Year 3 remote area students since 2008 and in Year 9 since 2013.

Inadequate funding for disadvantaged students

A primary factor behind the lack of progress in reducing inequity in education outcomes is the failure of government funding policies over the past decade. Government funding (Commonwealth and state/territory) increases have favoured private schools for the past 15 years, and who enrol only a small proportion of disadvantaged students.

Government funding per private school student increased by over double that for public schools between 1999-2000 and 2013-14 — 39 per cent compared to 17 per cent. The average annual increase for private schools was 2.2 per cent compared with only 1.0 per cent in public schools.

Yet, public schools enrol over 80 per cent of LES, Indigenous and remote area students. Equity in education will only improve by better directing government funding increases to disadvantaged students.

Little Progress in Reducing Inequity in Education

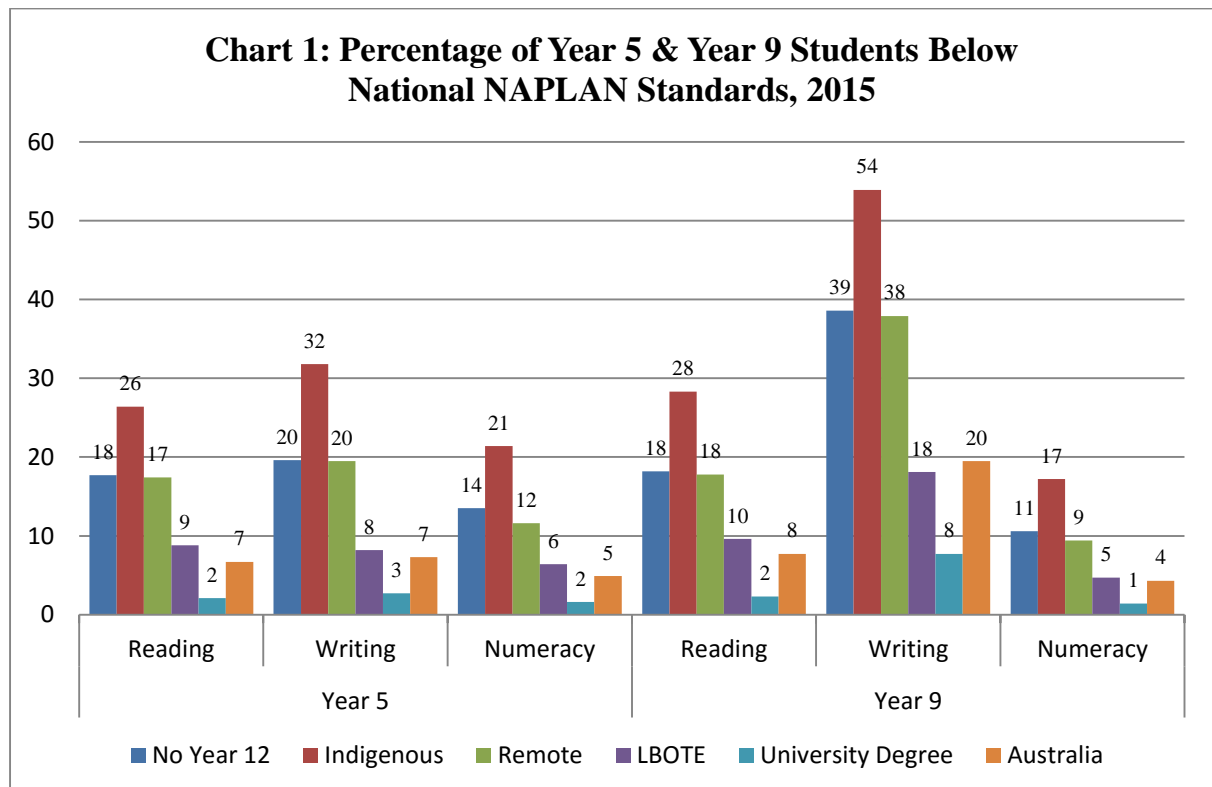
The national NAPLAN report published last December provides literacy and numeracy results for different groups of students in 2015. They can be compared with earlier results to assess progress, or otherwise, in reducing inequities in education between various groups of disadvantaged students and advantaged students.

The new results show continuing large inequities in education in Australia. Large proportions of disadvantaged students are not achieving national standards in literacy and numeracy and there are large achievement gaps between disadvantaged and advantaged students, most of which have not changed since 2008 and some of which have increased.

Many disadvantaged students are not achieving national standards

High proportions of disadvantaged students are not achieving national benchmarks compared to advantaged students and the average for Australia (Chart 1).

In 2015, 18 per cent of Year 5 students from low education status (LES) families did not achieve the reading standard, 20 per cent did not achieve the writing standard and 14 per cent did not achieve the numeracy standard compared with two to three per cent of students from high education status (HES) families and five to seven per cent for Australia. LES students are nine times more likely than HES students to not achieve the Year 5 national reading standard and seven times more likely to not achieve the writing and numeracy standards.



Eighteen per cent of Year 9 LES students did not achieve the national reading standard, 39 per cent did not achieve the writing standard and 11 per cent did not achieve the numeracy standard compared to one to two per cent of HES students in reading and numeracy and eight per cent for writing. The Australian averages were eight per cent in reading, 20 per cent in writing and four per cent in numeracy. The percentage of Year 9 low SES students below the

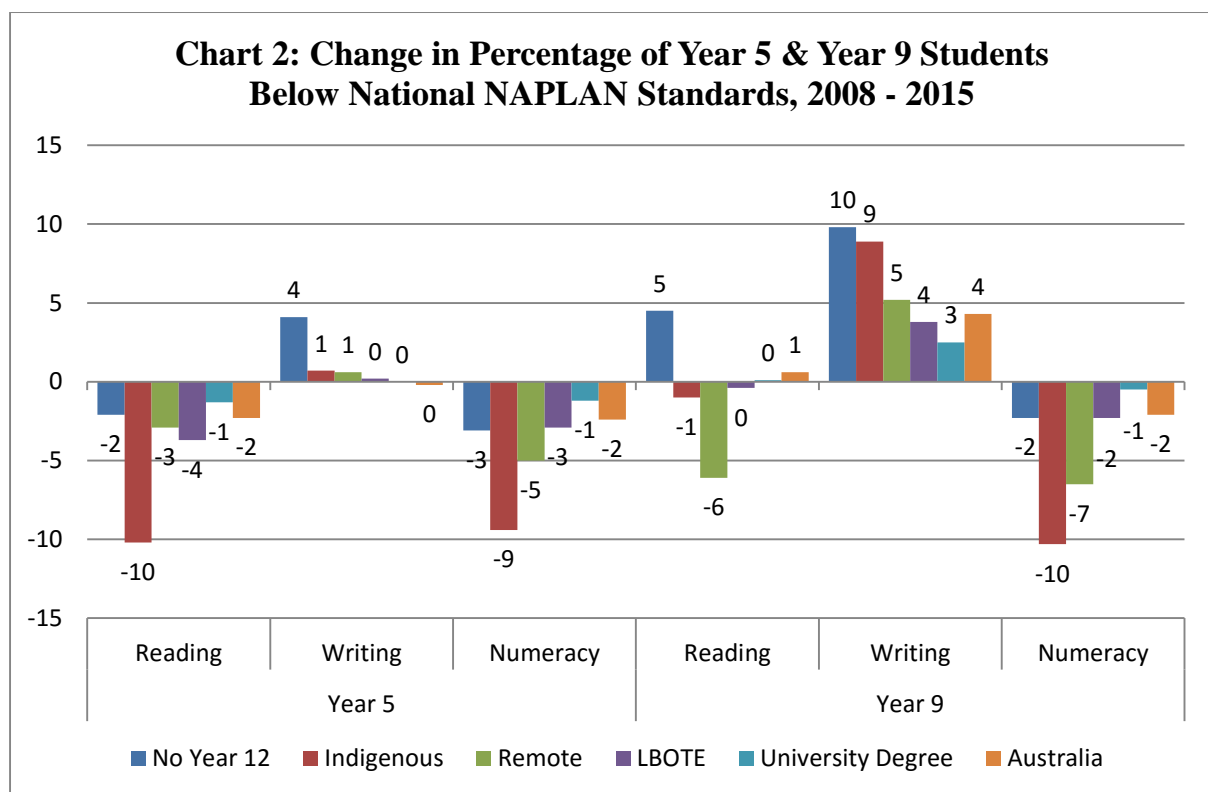
reading standard was nine times that of high SES students; five times that of high SES students in writing and eleven times in numeracy.

Very high proportions of Indigenous students did not achieve the standards. Twenty-six per cent of Year 5 Indigenous students did not achieve the reading standard, 32 per cent did not achieve the writing standard and 21 per cent did not achieve the numeracy standard. Indigenous Year 5 students are 13 times more likely to fail the reading standard, 11 times more likely to fail the writing standard and 10 times more likely to fail the numeracy standard than students from HES families.

In Year 9, 28 per cent of Indigenous students did not achieve the reading standard, 54 per cent did not achieve the writing standard and 17 per cent did not achieve the numeracy standard. Indigenous Year 9 students are 14 times more likely to fail the reading standard, seven times more likely to fail the writing standard and 17 times more likely to fail the numeracy standard than students from HES families.

The percentage of remote area students that did not achieve the standards was similar to that of LES students, although these figures exclude very remote area students. The percentages of students from Language Backgrounds Other Than English (LBOTE) that failed to achieve the standards were much lower than for the other equity groups and were similar to the national averages.

While the changes in the percentage of disadvantaged students below the national benchmarks since 2008 were mostly only small, there were some significant reductions for Indigenous and remote area students (Chart 2). However, there were also some significant increases in the percentage of low SES students below the standards.



Note: The change for writing is since 2011.

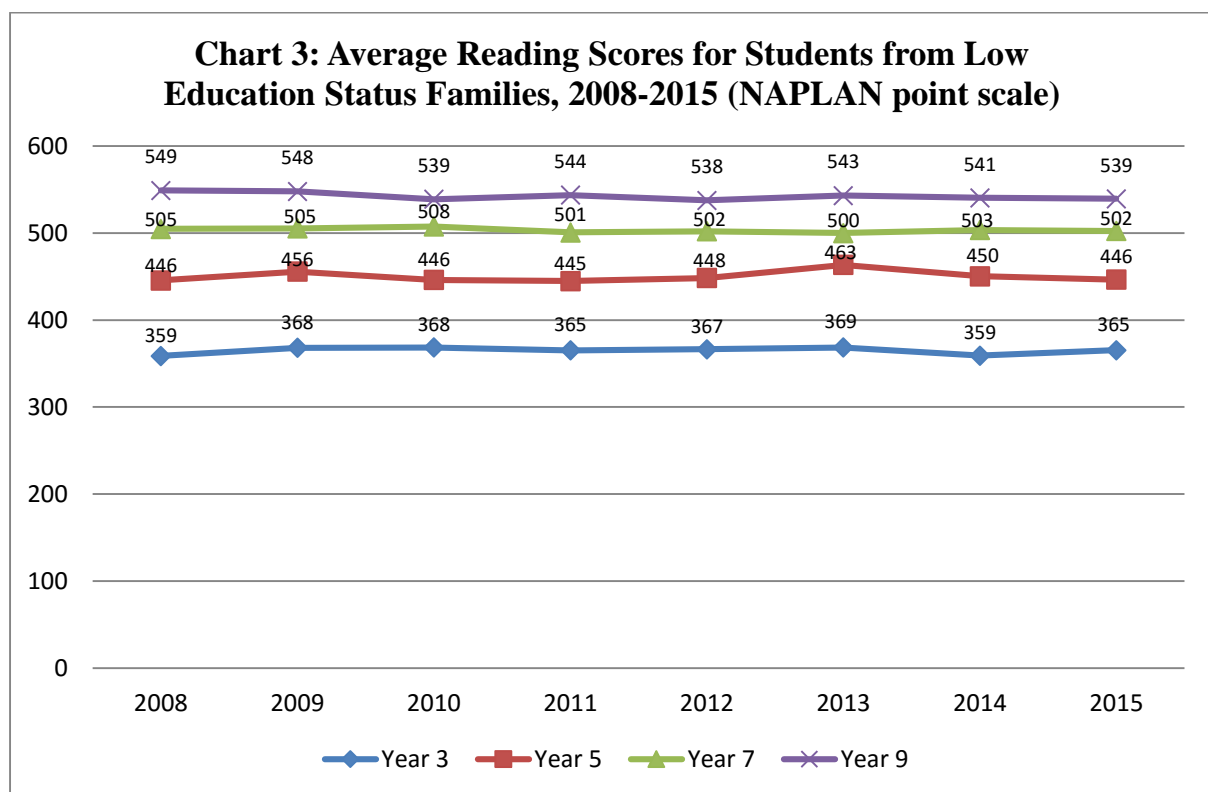
The percentage of Indigenous students below the Year 5 reading and numeracy standards fell by ten and nine percentage points respectively while the percentage below the Year 9 numeracy standard fell by ten points. There was little change in Year 5 writing and Year 9 reading, but a large increase below the Year 9 writing standard of nine percentage points.

There were small reductions in the percentage of LES students below the national reading and numeracy standards for Year 5 and for Year 9 numeracy. However, there was a large increase in the percentage below the Year 9 writing standard of 10 percentage points and smaller increases in Year 5 writing and Year 9 reading.

There were small reductions in the percentage of remote area students below the Year 5 reading and numeracy standards and significant reductions in Year 9 reading and numeracy. However, there was also a significant increase below the Year 9 writing standard.

Average NAPLAN scores of disadvantaged students have mostly not improved

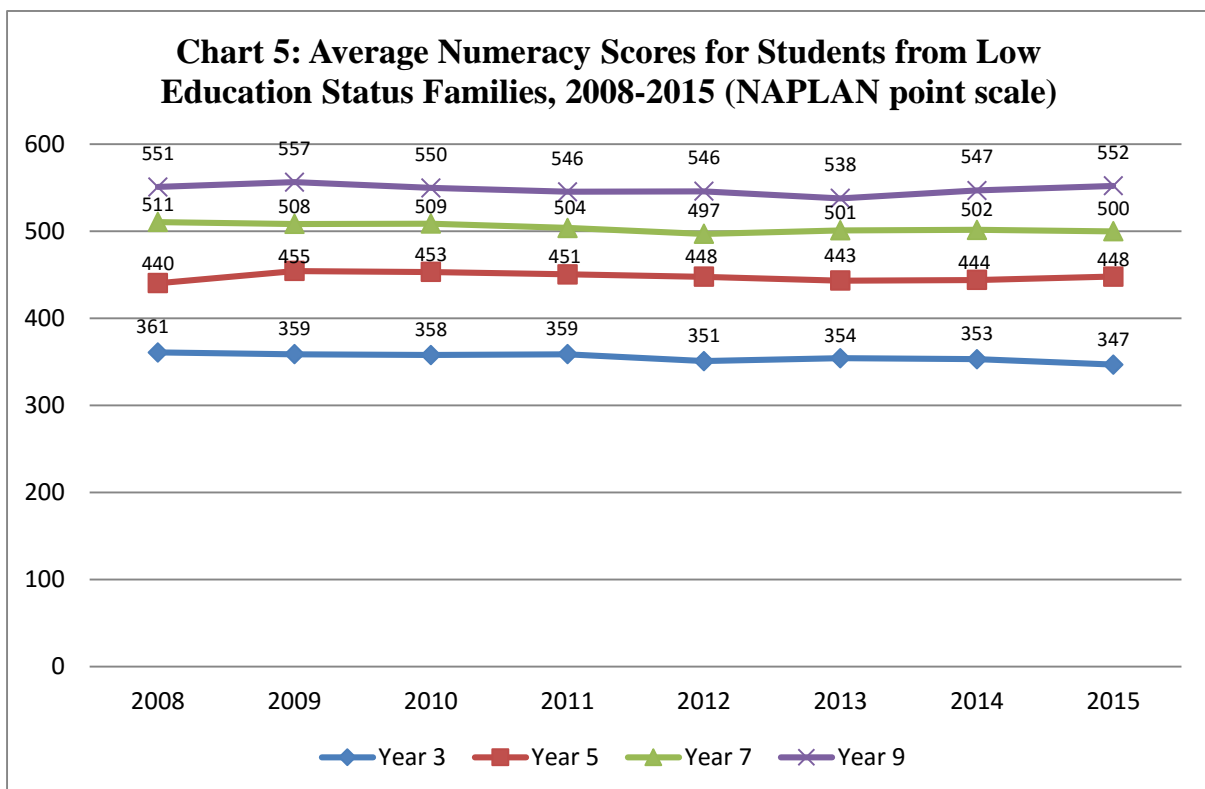
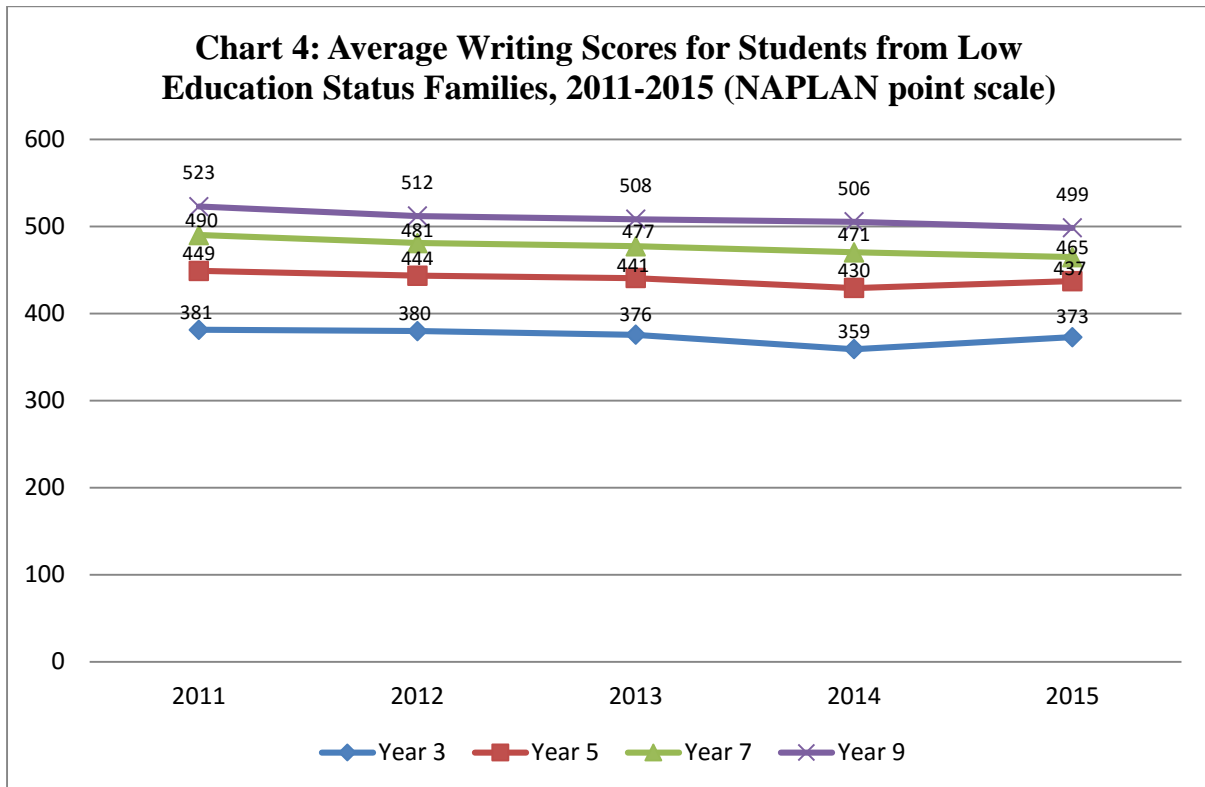
The average NAPLAN scores for students from LES families have not improved since 2008 or 2009 in any Year level in reading, writing (since 2011) and numeracy. Reading scores at all Year levels were largely unchanged since 2008 [Chart 3]. There was a ten-point decline in Year 9 reading but it may not be statistically significant.



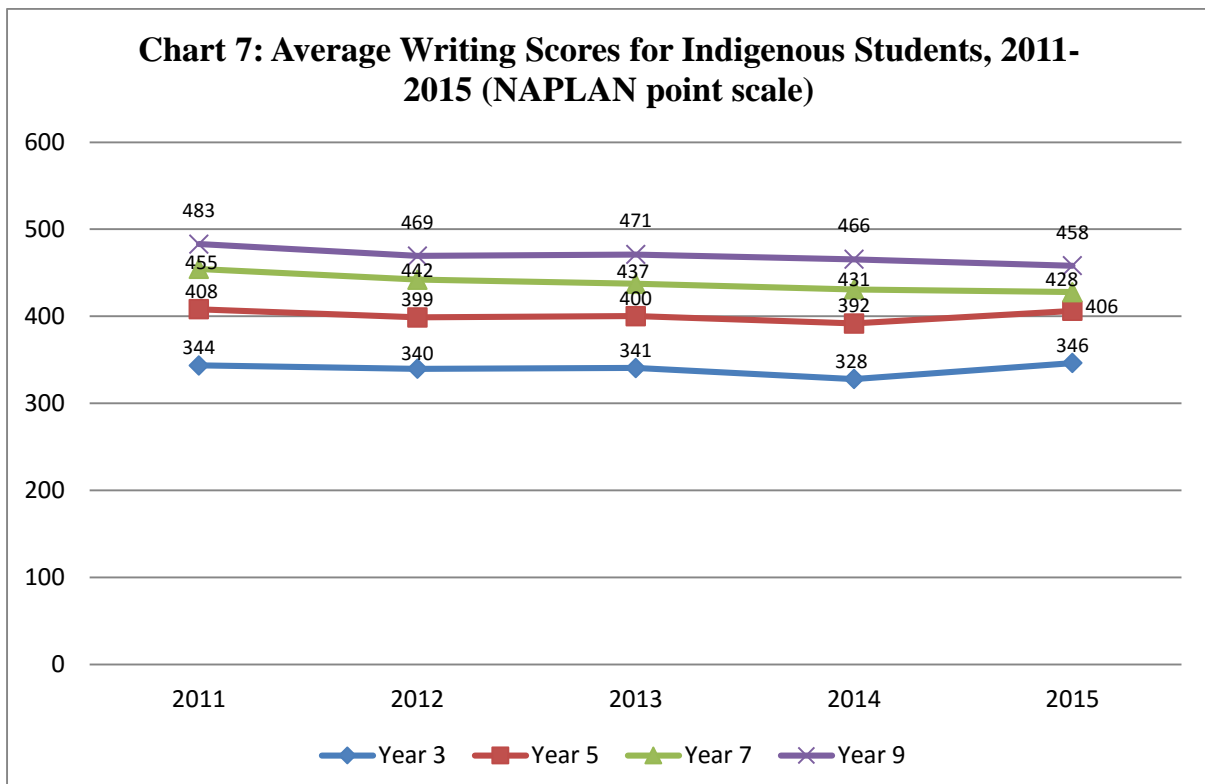
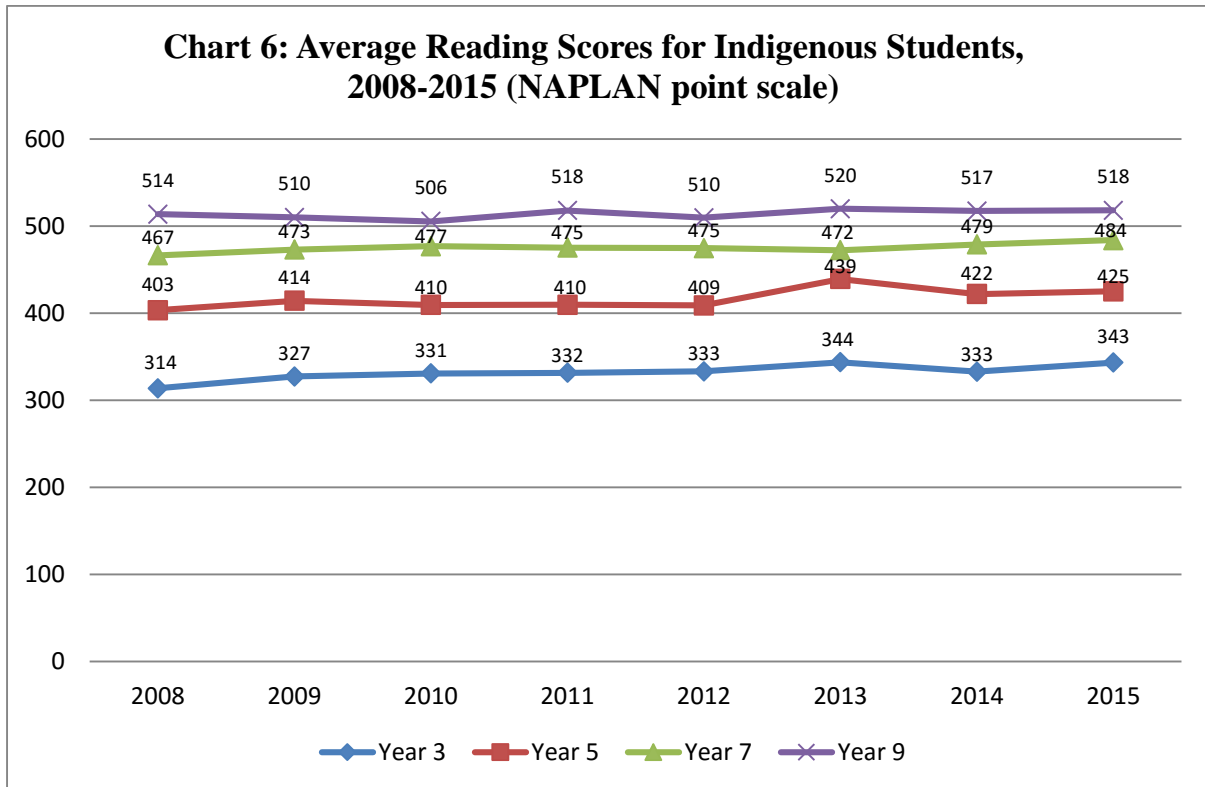
Writing scores appear to have declined in all Year levels [Chart 4]. There were significant declines in average writing scores in Year 7 and 9 with declines of 24 and 25 points respectively. These declines are roughly equivalent to a year or more of learning. The smaller declines in Year 3 and 5 may not be statistically significant.

Numeracy scores were largely unchanged since 2008 [Chart 5]. There was a decline of 11 points in Year 7 numeracy which may not be statistically significant and a decline of 14

points in Year 3 numeracy which may be significant. However, there was a significant improvement in Year 9 numeracy in the last two years, but it remains to be seen whether it is sustained because the improvement in 2009 was not sustained.

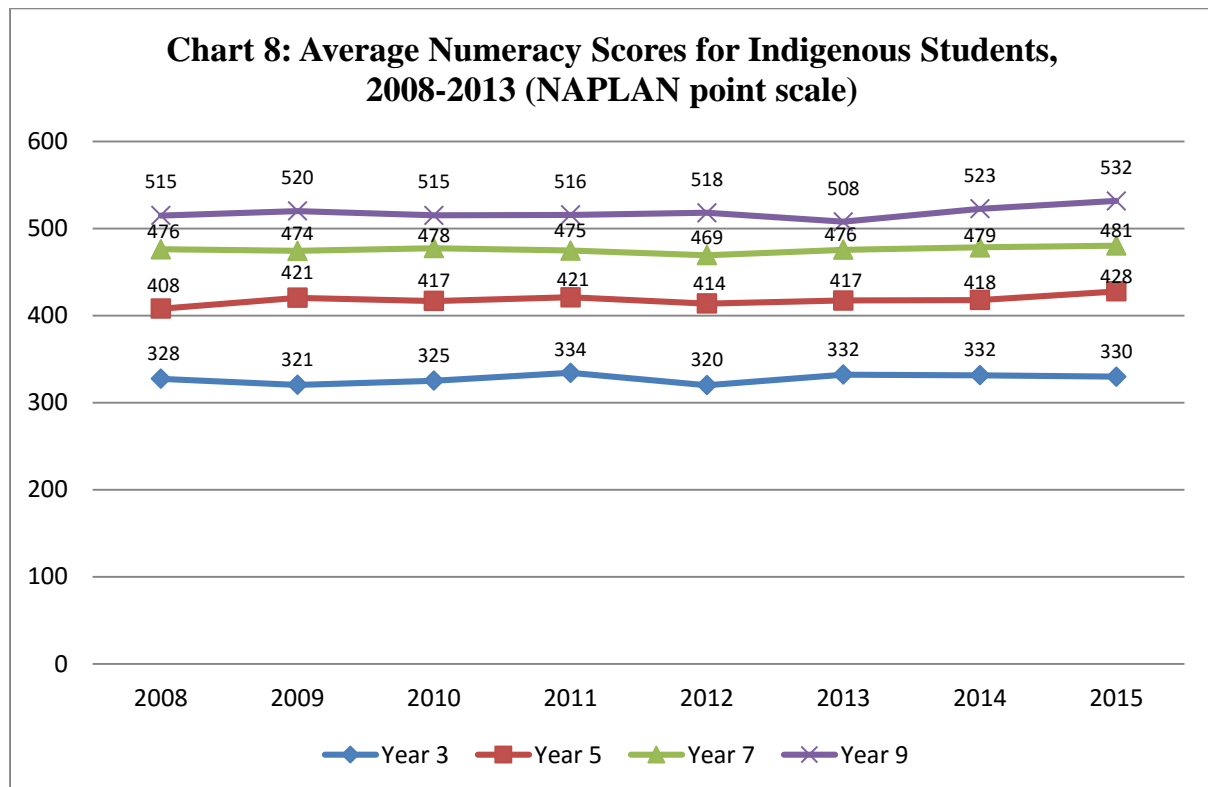


Test scores for Indigenous students have been mixed with some significant improvements but also some significant declines. There were statistically significant increases in reading in Years 3, 5 and 7 since 2008 which were equivalent to nearly one year of learning (Chart 6). However, about half the increases in Year 3 and 5 increases occurred between 2008 and 2009. There was little change in Year 9 reading.



There were statistically significant declines in writing scores since 2011 in Year 7 and 9 that are equivalent to over one year of learning (Chart 7). There was a significant decline in Year 5 writing between 2011 and 2014, which was almost completely reversed in 2015. There was no significant change in writing scores for Year 3.

There were statistically significant increases in numeracy in Year 5 and 9 although the large part of the gain in Year 5 was from 2008 to 2009 with little improvement since then (Chart 8). There was no significant change in Year 3 and Year 7.



The NAPLAN results for remote area students have also been mixed since 2008. There was a large increase in Year 3 reading which is likely to be statistically significant, but most of which occurred between 2008 and 2011 (Chart 9). There were smaller increases in Year 5 and 7 reading which may not be statistically significant. There was little change in Year 9 reading.

There were large declines in writing scores since 2011 in Year 7 and 9 that are likely to be statistically significant and are equivalent to about one year of learning (Chart 10). There was no significant change in writing scores for Year 3 and 5.

Average numeracy scores increased in Year 5 and 9, but were largely unchanged in Year 3 and 7 (Chart 11).

Chart 9: Average Reading Scores for Remote Area Students, 2008-2015 (NAPLAN point scale)

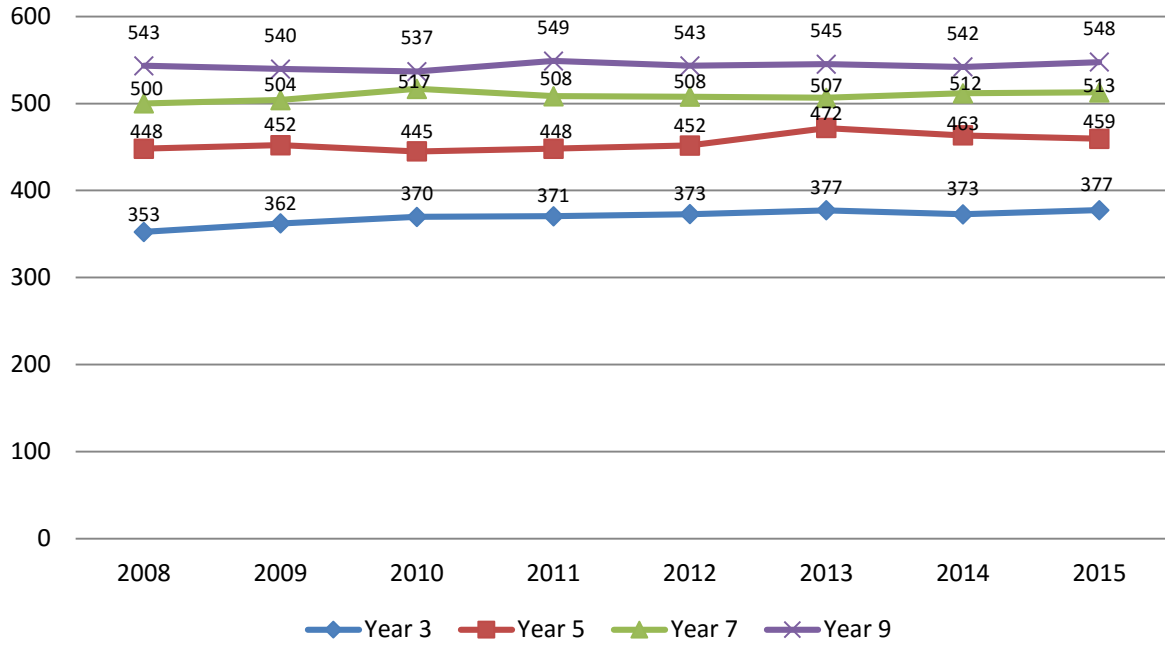
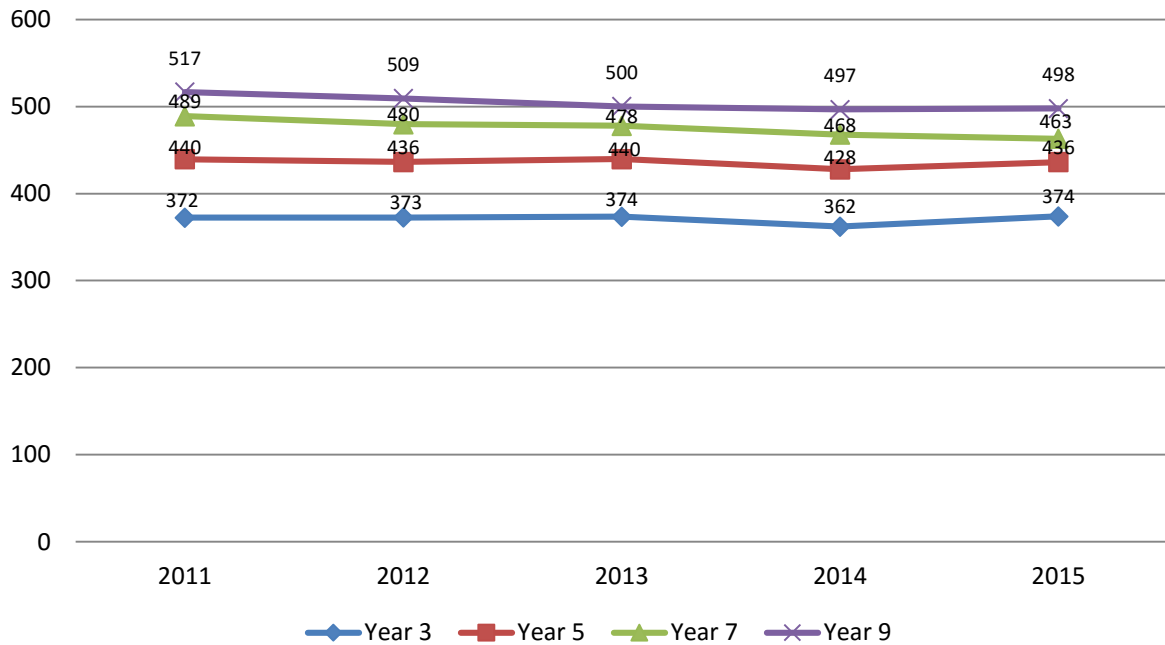
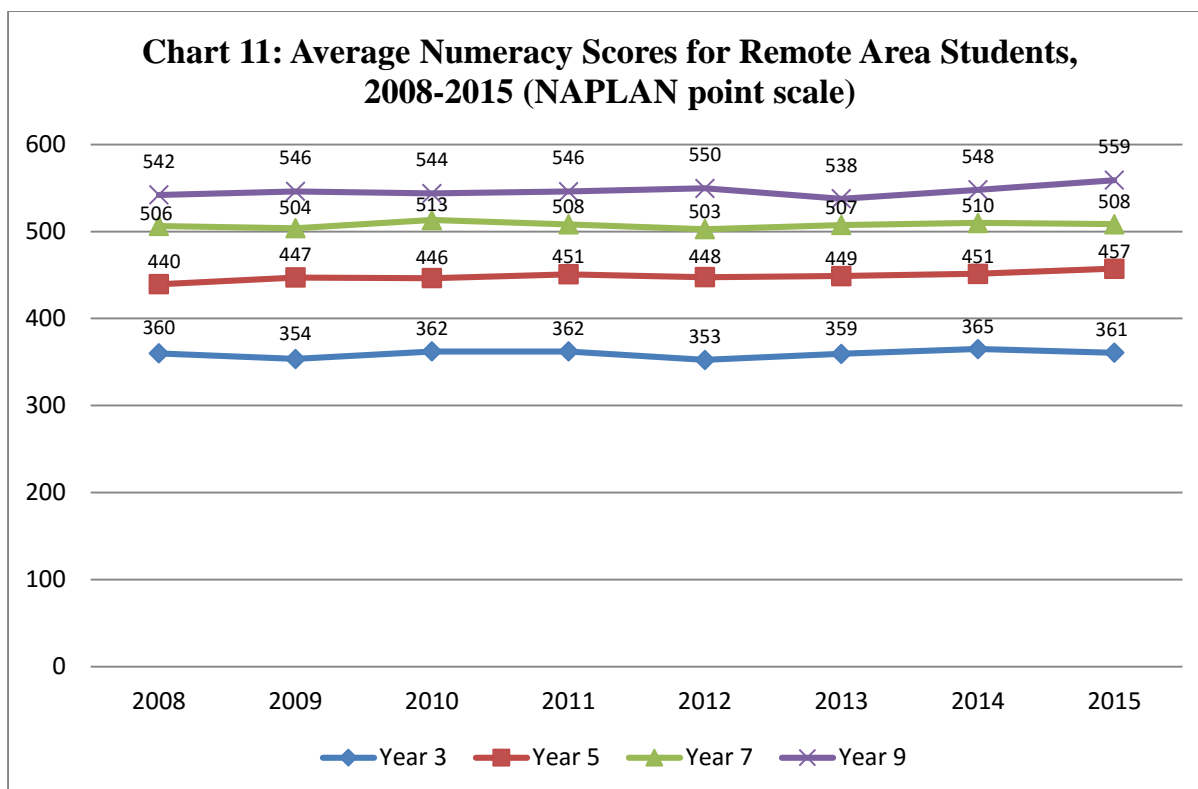


Chart 10: Average Writing Scores for Remote Area Students, 2011-2015 (NAPLAN point scale)





Large achievement gaps between advantaged and disadvantaged students remain

Average test scores for various groups of disadvantaged students are well below those of students from HES families and the average for Australia; as well, the gaps increase through the year levels (Chart 12). In Year 5, students from LES families are over two years behind students from HES families in reading, about two years behind in numeracy and a little less than two years behind in writing.¹ By Year 9, LES students are about four years behind HES students in reading, writing and numeracy.

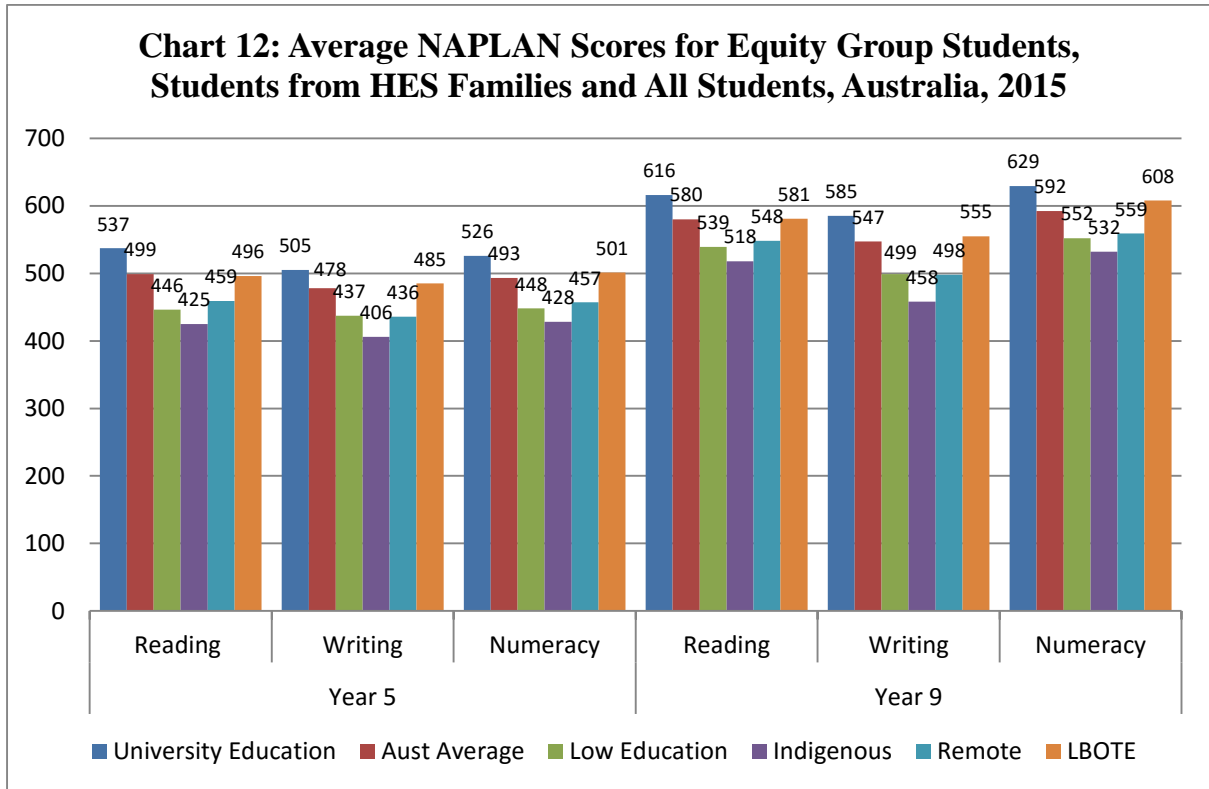
Year 5 Indigenous students are about three years behind HES students in reading and nearly three years behind in writing and numeracy and by Year 9 they are about five years behind in reading and numeracy and about six years behind in writing.

Year 5 remote area students are two years behind HES students in reading and slightly less than two years behind in writing and numeracy and by Year 9 they are about 3½ years behind in reading and numeracy and over four years behind in writing.

The gaps between LBOTE and HES students are less than in the case of LES and Indigenous students, but they also increase through the Year levels.

Year 9 LES students are achieving at about the same level as Year 5 HES students in reading and writing and only slightly above in numeracy. Year 9 Indigenous students are achieving below Year 5 HES students in reading and writing and about the same as Year 5 students in numeracy.

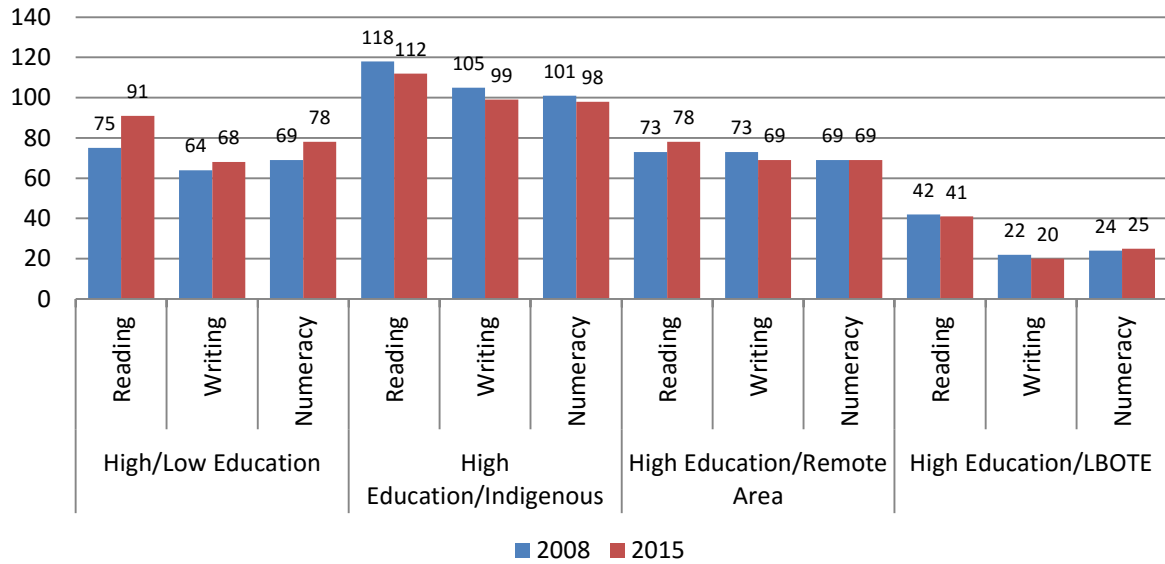
¹ At Year 5 one year of learning is equivalent to approximately 35-40 points on the NAPLAN scale and at Year 9 one year of learning is equivalent to about 20 points.



Few inroads have been made in reducing the achievement gaps between advantaged and disadvantaged students since 2008 and in some cases they have increased, most notably between HES and LES students. The gap in reading between HES and LES students increased significantly in Year 5 and Year 9 and for numeracy in Year 5 [Chart 13 & 14]. There was no significant change in the gaps in writing in Year 5 and 9 or for numeracy in Year 9.

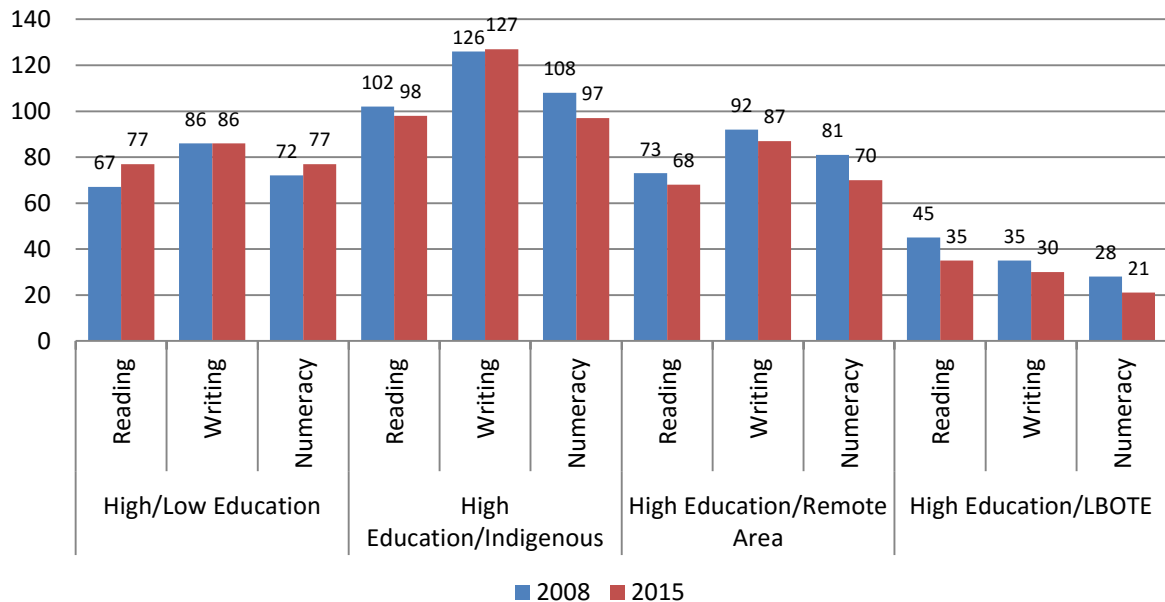
There was little change in the achievement gaps between Indigenous and HES students, except for a significant reduction in the Year 9 numeracy gap. Similarly, there was little change in the remote area/HES gaps, except for a reduction in the Year 9 numeracy gap. The only significant change in the LBOTE/HES gaps was a reduction in Year 9 reading.

Chart 13: Achievement Gaps Between Students from HES Families and Equity Group Students, Year 5, NAPLAN 2008 - 2015



Note: The change for writing is since 2011.

Chart 14: Achievement Gaps Between Students from HES Families and Equity Group Students, Year 9, NAPLAN 2008 - 2015



Note: The change for writing is since 2011.

Government funding policies have favoured advantaged students

A primary factor contributing to the lack of progress in improving the results of disadvantaged students and reducing the achievement gaps between them and advantaged students is the failure of government funding policies over the past decade. There has only been a small increase in funding adjusted for inflation and it was largely directed to advantaged students. Private schools received the largest funding increases even though they enrol only a small minority of all disadvantaged students and who comprise a much smaller proportion of private school enrolments than in public schools.

Between 1999-2000 and 2013-14, government funding (Commonwealth and state/territory) per private school student, adjusted for inflation, increased by \$2,203 per student compared with \$1,487 per student in public schools. The dollar increase for private schools was nearly 50 per cent higher than for public schools.

The overall percentage increase for private schools was over double that of public schools - 39 per cent compared to 17 per cent. The average annual increase for private schools was 2.2 per cent compared with 1.0 per cent in public schools.

More recently, government funding for public schools has been cut, while private school funding continued to increase. Between 2009-10 and 2013-14, public school funding fell by \$344 per student while private school funding increased by \$838 per student.

Government funding increases have been badly misdirected over the past 15 years. They have favoured the school sector with the least need. It is public schools that enrol the vast majority of disadvantaged students. In 2014, 82 per cent of students from low socio-economic status (SES) families, 84 per cent of Indigenous students, 79 per cent of remote area students and 87 per cent of very remote area students were enrolled in public schools.

There is also greater concentration of disadvantage in public schools. The My School website shows that in 2013 there were 1570 schools that could be identified by school sector with 50 per cent or more students from the lowest SES quartile. Of these, 94 per cent were public schools, three per cent were Catholic schools and two per cent were Independent schools.

There can be little wonder, then, that NAPLAN results for disadvantaged students have generally not improved since 2008, and that large achievement gaps between disadvantaged and advantaged students continue. The results for disadvantaged students will only improve by directing government funding increases to these students instead of their more advantaged peers.